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EXAMINER

JAMA, ISAAK R

ART UNIT

PAPER NUMBER

4163

NOTIFICATION DATE

DELIVERY MODE

10/01/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/553,000 | Applicant(s) SAKAMOTO, KENJI | |
| | Examiner ISAAK JAMA | Art Unit 4163 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>10/13/05; 1/11/06; 9/19/07; 11/08/07; 11/30/07 and 7/02/08.</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

1. The abstract of the disclosure is objected to because it is too long. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1, 4-6, 8-11, 13-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication Number 2001/0021998 (Margulis) in view of U.S. Patent Number 6,993,363 (Hsu)

3. Regarding claim 1, Margulis teaches a wireless terminal comprising: communication means for exchanging, with a base device (Figure 3, # 310, page 4, paragraph 0045) either (i) video data and/or audio data (Figure 8, # 812, video, audio and data), or (ii) a control command containing transmission channel switching information (page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source); But Margulis fails to disclose a communication condition detection means for detecting a communication condition; and indication means for indicating at least a transmission condition of the control command, according to the communication condition detected by the communication condition detection means. Hsu teaches a wireless monitor tool for a mobile station wherein a small passive monitor tool provides one or more alerts to a user of a mobile station, including an alert indicating an out-of-range mobile station, or that the mobile station signals are blocked by some obstacle (abstract). Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to inform the user of the communication link status.

4. Regarding claim 4, Hsu further teaches a wireless terminal, wherein the communication condition detection means detects the communication condition with the base device, with which a communications link is established (column 12, lines 19-24).

Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to inform the user of any communication link interruption.

5. Regarding claim 5, Hsu further teaches a wireless terminal, wherein the indication means indicates at least any one of reception sensitivity information items indicating that the video data and/or the audio data are interrupted, that transmission channels are being switched, that connection is being made, and that the wireless terminal is out of communication range (column 12, lines 25-30). Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to provide the user with perceptible alerts.

6. Regarding claim 6, Margulis further teaches a wireless terminal, wherein the indication means either displays a message by using display means or carries out message sound production by using audio output means (Page 2, paragraph 0020).

7. Regarding claim 8, Margulis further teaches a wireless terminal, wherein the communication means transmits either (i) the video data and/or the audio data, or (ii) the control command, in accordance with a spread spectrum wireless method (page 4, paragraph 0055).

8. Regarding claim 9, Margulis teaches a wireless terminal, wherein the communication means performs low-power short-distance two-way wireless communication in conformity to wireless LAN, or Bluetooth, and Ultra Wide Band (Page 6, paragraph 0069; i.e. the network processing procedure may depend on various factors such as the particular wireless transmission techniques utilized for effective wireless transmission or the type of bus arbitration required for WAN or LAN interfaces).

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9. Regarding claim 10, Margulis teaches that the communication means transmits the video data and/or audio data in a form of MPEG stream encoded in conformity with an MPEG-2 encoding method (page 5, paragraphs 0058 and 0060, respectively).

10. Regarding claim 11, Margulis teaches a wireless terminal, comprising: a display device for displaying a video signal according to the video data that the display device receives (Figure 3, # 314).

11. Regarding claim 13, Margulis teaches a base device (Figure 1, # 156) for exchanging, with the wireless terminal (page 3, paragraph 0040; i.e. the wireless base station may be implemented as a set-top box which communicates with a wireless remote), either (i) video data and/or audio data (Figure 8, # 812, video, audio and data), or (ii) a control command containing transmission channel switching information (page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source).

12. Regarding claim 14, Hsu further teaches a base device, comprising: communication condition detection means for detecting a communication condition the base device transmitting, to the wireless terminal, information indicative of the communication condition detected by the communication condition detection means (abstract). Therefore, it would have been obvious to include the teaching of Hsu into the system of Margulis in order to notify the user of any lack of communication.

13. Regarding claim 16, Margulis teaches a base device, wherein the video data and/or the audio data is received via a broadcast receiving tuner (Page 6, paragraph 0067).

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14. Regarding claim 17, Margulis teaches a wireless system, comprising: the wireless terminal; and a base device (Figure 3, #310 and Figure 5, # 156) for exchanging, with the wireless terminal (page 4, paragraph 0045), either (i) video data and/or audio data (Figure 8, # 812, video, audio and data), or (ii) a control command containing transmission channel switching information (page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source).

15. Regarding claim 18, Margulis teaches a method for controlling a wireless terminal which constitutes a wireless system having the wireless terminal and a base device (Figures 1 and 3, #s 156 & 310) which are connected to each other through a wireless network (page 6, paragraph 0072), the method comprising the steps of: exchanging, with the base device either (i) video data and/or audio data (Figure 8, # 812, video, audio and data), or (ii) a control command containing transmission channel switching information (page 4, paragraph 0047; i.e. the remote controller responsively displays at least one selectable program source). But Margulis fails to disclose a communication condition detection means for detecting a communication condition; and indication means for indicating at least a transmission condition of the control command, according to the communication condition detected by the communication condition detection means. Hsu teaches a wireless monitor tool for a mobile station wherein a small passive monitor tool provides one or more alerts to a user of a mobile station, including an alert indicating an out-of-range mobile station, or that the mobile station signals are blocked by some obstacle (abstract). Therefore, it would have been obvious

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to include the teaching of Hsu into the system of Margulis in order to inform the user of the communication link status. .

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis and Hsu as applied to claim 1 above in view of U.S. Patent Number 7,210,158 (Forler).

17. Regarding claim 2, Margulis and Hsu has been discussed above. What Margulis and Hsu fail to teach is that the wireless terminal further comprising: transmission channel maintaining means for (i) measuring time from which communication is interrupted, and (ii) maintaining a transmission channel until a predetermined period of time has elapsed since interruption of the communication. Forler teaches a viewer blocking system whereby, if the television system fails to detect a new program related information within a predetermined period of time as determined by the incrementing of the V-chip Packet Timer, the television system will allow user access to the channel, or maintain the channel unblocked (column 6, lines 21-25). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the channel maintaining means of Forler into the combined system of Margulis and Hsu in order to avoid a complete loss of transmission.

18. Claims 3, 7, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis and Hsu as applied to claim 1 above in view of U.S. Patent Number 7,167,679 (Sano).

19. Regarding claim 3, Margulis and Hsu has been discussed above as applied to claim 1. What neither Margulis nor Hsu fail to teach is that the wireless terminal detects the communication condition according to at least one of (i) an electric field intensity of a

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received radio wave, (ii) an error rate, and (iii) a number of times of retransmission request made based on the error rate. Sano teaches a display terminal and method for a radio LAN system for receiving image data from an apparatus by radio communication wherein, a reception quality level is displayed when the reception electric field intensity at the display terminal is sufficiently high, or when the bit error rate exhibits a high bit error rate (column 9, lines 59-64). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the signal reception quality of Sano into the combined system of Margulis and Hsu in order to assess the optimum positioning of the wireless terminal with respect to the base station for good quality reception of the base station transmitted signals.

20. Regarding claim 12, Margulis and Hsu has been discussed above as applied to claim 1, but what Margulis and Hsu fail to specifically teach is that the wireless terminal includes communication condition detection means for determining whether or not an image displayed by the display device is distorted. Sano teaches a display terminal for a radio LAN system which is configured for receiving image data from a transmitting apparatus by radio communication and displaying an image based on the received image data on a display section. The display terminal comprises a reception quality supervision section, and a reception quality display control section displays a reception quality level of the display terminal on a display section of the display terminal indicative of an output of the reception quality supervision section (column 2, lines 43-55).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

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the invention was made to include the signal reception quality of Sano into the combined system of Margulis and Hsu in order to ascertain the received image quality.

21. Regarding claims 7 and 15, Margulis and Hsu has been discussed above as applied to claims 1 and 13. What Margulis and Hsu fail to teach is a wireless terminal, wherein the wireless terminal switches the transmission channels either (i) every cycle corresponding to not less than a period during which the base device selects all the transmission channels, or (ii) every cycle corresponding to a period during which the base device selects all the transmission channels and which corresponds to time in which the wireless terminal maintains one of the transmission channels. Sano teaches a reception quality supervision section including a bit error rate calculation section and a comparison arithmetic operation section (Figure 7, #s 77, 73 and 78 respectively), wherein an error rate per unit time is calculated by the bit error rate calculation section, and the comparison arithmetic operation section compares the calculated bit error with a threshold value (column 11, lines 32-42), and the result of the comparison arithmetic operation section is held for a unit time, and that a value of the result is not a value that appears intermittently after each time unit rather it can be varied after each time unit and can be displayed continuously over time, and in addition Sano teaches that when a user command controls the display, if the user turns off the display of the quality level of the received data, no display is performed (Figure 8, columns 12 and 13, lines 36-42 and lines 7-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the signal reception quality of Sano into the combined system of Margulis and Hsu in order to maintain image quality.

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22. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis and Hsu as applied to claim 1 above in view of U.S. Patent Application Publication Number 2004/0152414 (Wang).

23. Regarding claims 19 and 20, Margulis and Hsu has been discussed above as applied to claim 1, but neither Margulis nor Hsu specifically teach that wireless terminal teaches a program for controlling the wireless terminal, the program causing a computer to function as each of the means, and that computer-readable storage medium for storing the wireless terminal control program. Wang teaches a remote control device capable of receiving video signal through a television tuner and displaying the video signal, the remote control device having a central processing unit (CPU) that can decode instructions, and a ROM, RAM and Flash memories (Figure 2, #s255, 256, 257 and 258; page 3, paragraph 0040). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the software and memory of Wang into the combined system of Margulis and Hsu in order to automatically control the operation of a system.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Number 6,097,441 (Allport) teaches a method and system for dual display interaction with integrated television and internet content. U.S. Patent Number 7,360,000 (Takita et al.) teaches an information transmitting/receiving system, method and apparatus. U.S. Patent Number 6,819,944 (Sato) teaches a mobile terminal equipped with adapter for image display and method for handling changes in

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connection line quality. U.S. Patent Application Publication Number 2003/0072257 (Ikedo et al.) teaches a digital broadcast channel reception system, method and a portable terminal for use in such system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAK JAMA whose telephone number is (571)270-5887. The examiner can normally be reached on 7:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Robinson can be reached on (571) 272-2319. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IRJ/

/Mark A. Robinson/
Supervisory Patent Examiner, Art Unit 4163